CLAIMS

What is claimed is:

1. A method for analyzing a biological sample to detect cells infected by human papilloma virus (HPV), comprising:

passing a medium containing said sample across a filter to collect material from said medium on said sample, said filter having a pore size that is greater than a dimension of a HPV particle but smaller than a dimension of a HPV infected cell; and

examining said collected material to determine if HPV infected cells are present in said material.

2. The method of claim 1, wherein said pore size is within a range of 0.2 micron to 10 microns.

3. The method of claim 1, wherein said pore size is approximately 8 microns.

4. A method for separating cells from extracellular human papilloma virus (HPV), comprising:

providing a medium containing said cells and extracellular HPV particles; and

passing said medium across said filter to collect a majority of said cells on said filter, while passing a majority of said extracellular HPV particles through said filter.

5. The method of claim 4, wherein said pore size is within a range of 0.2 micron to 10 microns.

6. The method of claim 4, wherein said pore size is approximately 8 microns.

7. The method of claim 4, wherein said cells are not infected by HPV.

8. The method of claim 4, wherein at least one of said cells is infected by HPV.

9. A method for separating cells from extracellular human papilloma virus (HPV), comprising:

providing a medium having a first extracellular HPV to cell ratio; and

passing said medium across said filter to collect a substance on said filter, said substance having a second extracellular HPV to cell ratio substantially less than said first extracellular HPV to cell ratio.

10. The method of claim 9, wherein said pore size is within a range of 0.2 micron to 10 microns.

11. The method of claim 9, wherein said pore size is approximately 8 microns.

12. The method of claim 9, wherein said cells are not infected by HPV.

13. The method of claim 9, wherein at least one of said cells is infected by HPV.

14. A method for analyzing a biological sample to detect cells infected by a virus, comprising:

passing a medium containing said sample across a filter to collect material from said medium on said sample, said filter having a pore size that is greater than a dimension of a viral particle but smaller than a dimension of a virus infected cell; and

examining said collected material to determine if virus infected cells are present in said material.

15. The method of claim 14, wherein said pore size is within a range of 0.2 micron to 10 microns.

16. The method of claim 14, wherein said pore size is approximately 8 microns.

17. The method of claim 14, wherein said cells are epithelial cells.

18. The method of claim 14, wherein said cells are cervical cells.

19. A method for separating cells from extracellular viral particles, comprising:

providing a medium containing said cells and said extracellular viral particles; and

passing said medium across said filter to collect a majority of said cells on said filter, while passing a majority of said extracellular viral particles through said filter.

20. The method of claim 19, wherein said pore size is within a range of 0.2 micron to 10 microns.

21. The method of claim 19, wherein said pore size is approximately 8 microns.

22. The method of claim 19, wherein said cells are not infected by a virus.

23. The method of claim 19, wherein at least one of said cells is infected by a virus.

24. The method of claim 19, wherein said cells are epithelial cells.

25. The method of claim 19, wherein said cells are cervical cells.

26. A method for separating cells from extracellular viral particles, comprising:

providing a medium having a first extracellular viral particle to cell ratio; and

passing said medium across said filter to collect a substance on said filter, said substance having a second extracellular viral particle to cell ratio less than said first extracellular HPV to cell ratio.

27. The method of claim 26, wherein said pore size is within a range of 0.2 micron to 10 microns.

28. The method of claim 26, wherein said pore size is approximately 8 microns.

29. The method of claim 26, wherein said cells are not infected by a virus.

30. The method of claim 26, wherein at least one of said cells is infected by a virus.

31. The method of claim 26, wherein said cells are epithelial cells.

32. The method of claim 26, wherein said cells are cervical cells.